

REMARKS

The present application was filed on February 11, 2000 with claims 1-27. Claims 1-27 are currently pending in the application. Claims 1, 14 and 27 are the independent claims.

In the Office Action, the Examiner rejected claims 1-27 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,097,720 (hereinafter "Araujo").

Applicants have amended the specification to correct minor errors of a typographical nature.

Applicants respectfully traverse the §102(e) rejection, and request reconsideration of the present application in view of the following remarks.

With regard to the §102(e) rejection, Applicants initially note that the Manual of Patent Examining Procedure (MPEP), Eight Edition, August 2001, §2131, specifies that a given claim is anticipated "only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, MPEP §2131 indicates that the cited reference must show the "identical invention . . . in as complete detail as is contained in the . . . claim," citing Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). For the reasons identified below, Applicants submit that the Examiner has failed to establish anticipation of at least independent claims 1, 14 and 27 by the Araujo reference.

Independent claim 1 is directed to a method for use in configuring a device coupled to a communications network. The method includes the steps of automatically determining a link type associated with a communication link between a first device and at least one additional device coupled to the communications network by transmitting one or more messages from the first device and examining a corresponding response received by the first device over the communication link, and configuring at least one of the first and additional devices in accordance with the determined link type.

An illustrative example of one possible implementation of the invention falling within the above-noted limitations of claim 1 is an arrangement in which an autosensor implemented in an ADSL termination unit-receive (ATU-R) device or other customer premises equipment (CPE) determines which of a number of available link variants is required for a communication link

between the first device and the additional device. The autosensor examines responses to messages sent over the link in order to determine one or more link variants associated therewith. One or more of the devices are then automatically configured to support the determined link variant(s), for example, by activation of one or more appropriate protocol entities in the device(s). See the specification at, for example, page 7, lines 7-11 and page 21, lines 1-6. Advantageously, the automated link variant determination and corresponding device protocol configuration of the present invention avoids the problems associated with the conventional approaches described by Applicants in their specification at page 1, line 23 to page 2, line 6.

The Examiner in formulating the §102(e) rejection argues that the limitations of independent claim 1 are met by the teachings of Araujo relating to Layer 2 Tunneling Protocol (L2TP), as set forth in column 9, lines 15-34. See the Office Action at page 2, section 3. Applicants respectfully disagree. The portion of the Araujo reference relied upon by the Examiner provides the following disclosure:

FIG. 6 shows the minimal encapsulation for PPP data packets sent between two L2TP endpoints. For our example, the two endpoints will be the access multiplexer and the ISP RAS. The access multiplexer will multiplex multiple PPP sessions onto a single virtual circuit by using L2TP. The minimal L2TP encapsulation consists of prefixing the PPP packet 120, 121 with a 6-byte L2TP header. The first byte 122 in this encapsulation is set to all zeroes, which indicates an L2TP payload packet using no length field, no send sequence number, and no receive sequence number. The second byte 123 is set to a value of binary '00000010', which is the present L2TP version. The next two bytes 124 are used to define an L2TP Tunnel. An L2TP Tunnel exists between 2 endpoints. Multiple logical connections may be associated with a particular tunnel. Each logical session is defined via the L2TP Call ID 125. PPP data belonging to a particular session from a particular CPE is mapped one-to-one to a particular L2TP Tunnel and logical connection via the L2TP Tunnel ID and L2TP Call ID bytes.

Note that there are two parallel components of L2TP operating over a given L2TP tunnel--control messages between the two tunnel endpoints, and payload packets sent

between the endpoints. The payload packets are used to transport L2TP encapsulated PPP packets for user sessions between the tunnel endpoints. The structure of such packets is what is shown in FIG. 6 and what was described earlier.

The actual assignment of Call IDs within a tunnel is accomplished via the exchange of control messages between tunnel endpoints.

The above-quoted portion of Araujo fails to meet the limitations of claim 1. As indicated previously, claim 1 calls for automatically determining a link type associated with a communication link between a first device and at least one additional device coupled to the communications network by transmitting one or more messages from the first device and examining a corresponding response received by the first device over the communication link, and configuring at least one of the first and additional devices in accordance with the determined link type. This is not what is happening in the portion of Araujo relied upon by the Examiner. Instead, the two endpoints which exchange the “control messages” referred to in Araujo are already configured to operate in accordance with the L2TP and PPP protocols. The control messages are used to assign Call IDs for an already-established L2TP tunnel, and thus for a communication link for which link type has already been determined. These control messages are not utilized to determine a link type associated with a communication link between the two endpoints, such that at least one of the endpoints may be “configured . . . in accordance with the determined link type,” as set forth in claim 1. The limitations of claim 1 are thus not met by the Araujo reference.

Since Araujo fails to teach or suggest each and every limitation of claim 1 in as complete detail as is contained in the claim, as required by the above-cited MPEP §2131, claim 1 is not anticipated by Araujo.

Independent claims 14 and 27 each include limitations similar to those of claim 1 as described above, and are therefore believed allowable for substantially the same reasons that claim 1 is believed allowable.

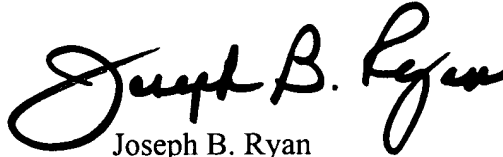
Dependent claims 2-13 and 15-26 are believed allowable for at least the reasons identified above with regard to their respective independent claims.

Moreover, one or more of these dependent claims are believed to define additional separately-patentable subject matter relative to Araujo and the other art of record.

For example, dependent claims 11 and 24 each include limitations relating to performing a test to determine if the communication link is an LLC-type link, performing at least one additional test of a first type if the link is not an LLC-type link, and performing at least one additional test of a second type if the link is an LLC-type link. The Examiner argues that these limitations are somehow anticipated by the disclosure in column 5, lines 1-10 of Araujo, but Applicants have been unable to find any teaching whatsoever regarding the limitations at issue in the cited portion of Araujo. Similar fundamental deficiencies are present in the application of Araujo to other dependent claim limitations.

In view of the foregoing, Applicants respectfully submit that claims 1-27 are in condition for allowance, and request withdrawal of the §102(e) rejection.

Respectfully submitted,

A handwritten signature in black ink, reading "Joseph B. Ryan". The signature is fluid and cursive, with the first name "Joseph" being the most prominent part.

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